

McCloud Area Groundwater Basin

- Groundwater Basin Number: 5-35
- County: Siskiyou
- Surface Area: 21,320 acres (33 square miles)

Basin Boundary and Hydrology

The McCloud Area Groundwater Basin is located at the base of Mount Shasta on the southeast slope. Elevation of the basin ranges from 3,060 feet mean sea level in the south to 6,000 feet mean sea level in the north. The basin is bounded to the west by Pleistocene volcanic rocks and glacial deposits of Mount Shasta. The basin is bounded to the north by Pliocene basalt, to the east by Pliocene basalt and Pleistocene volcanic rocks, and to the south by Paleozoic marine sedimentary and metasedimentary rocks (Strand 1962). Numerous creeks that drain Mount Shasta transect the basin and McCloud River drains the basin to the south. Annual precipitation ranges from 49- to 55-inches, increasing to the north.

Hydrogeologic Information

Hydrogeologic information was not available for the following:

Water-Bearing Formations

Groundwater Level Trends

Groundwater Storage

Groundwater Budget (Type B)

The estimate of groundwater extraction for the McCloud Area Basin is based on a 1991 survey conducted by the California Department of Water Resources. The survey included land use and sources of water.

Groundwater extraction for agricultural use is estimated to be 3 acre-feet.

Groundwater extraction for municipal and industrial uses is estimated to be 420 acre-feet. Deep percolation of applied water is estimated to be 280 acre-feet.

Groundwater Quality

Water Quality in Public Supply Wells

Constituent Group ¹	Number of wells sampled ²	Number of wells with a concentration above an MCL ³
Inorganics – Primary	0	0
Radiological	0	0
Nitrates	1	0
Pesticides	0	0
VOCs and SVOCs	0	0
Inorganics – Secondary	0	0

¹ A description of each member in the constituent groups and a generalized discussion of the relevance of these groups are included in *California's Groundwater – Bulletin 118* by DWR (2003).

² Represents distinct number of wells sampled as required under DHS Title 22 program from 1994 through 2000.

³ Each well reported with a concentration above an MCL was confirmed with a second detection above an MCL. This information is intended as an indicator of the types of activities that cause contamination in a given basin. It represents the water quality at the sample location. It does not indicate the water quality delivered to the consumer. More detailed drinking water quality information can be obtained from the local water purveyor and its annual Consumer Confidence Report.

Well Characteristics

Well yields (gal/min)		
Irrigation		380 (1 Well Completion Report)
Total depths (ft)		
Domestic	Range: 43 – 280	Average: 132 (32 Well Completion Reports)
Irrigation	Range: 112 – 227	Average: 170 (2 Well Completion Reports)

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
Department of Health Services	Groundwater levels	NKD
	Miscellaneous water quality	NKD
	Miscellaneous water quality	1
	Miscellaneous water quality	

NKD – No Known Data

Basin Management

Groundwater management:	Siskiyou County adopted a groundwater management ordinance in 1998.
Water agencies	
Public	McCloud CSD
Private	None

Selected References

- Strand RG. 1962. Geologic Map of California [Weed Sheet] Scale 1:250,000. California Division of Mines and Geology.
- U. S. Geological Survey. 1956. Plan and Profile, McCloud River, California : Shasta Lake to Mile 38.5; Squaw Valley Creek to Mile 20--Dam Sites. USGS.
- Wagner DL, Saucedo GJ. 1987. Geologic Map of the Weed Quadrangle, California, Regional Geologic Map Series 4A. California Division of Mines and Geology.

Bibliography

- Bailey EH. 1966. Geology of Northern California. California Division of Mines and Geology. Bulletin 190.
- California Department of Water Resources. 1975. California's Ground Water. California Department of Water Resources. Bulletin 118.

California Department of Water Resources. 1980. Ground Water Basins in California.
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Dickinson WR, Ingersoll RV, Grahm SA. 1979. Paleogene Sediment Dispersal and
Paleotectonics in Northern California. Geological Society of America Bulletin 90:1458-
1528.

Planert M, Williams JS. 1995. Ground Water Atlas of the United States, Segment 1,
California, Nevada. USGS. HA-730-B.

Errata

Changes made to the basin description will be noted here.